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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/645,254	08/24/2000	Byung Taek Kim	CHUNP0155US	8529

7590 02/12/2003

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EXAMINER

LEE, BENNY T

ART UNIT PAPER NUMBER

2817

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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09/645254

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

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ART UNIT	PAPER NUMBER
	12

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on 25 Nov 2002 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 25 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-10, 12 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-10, 12 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are: ☐ acceptable;
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☒ The proposed drawing correction, filed 25 Sep 2002, has been ☒ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 September 2002 has been entered.

The disclosure is objected to because of the following informalities: In figs. ~~2~~, ~~6A~~, the previously indicated descriptive wording still needs to be described in the specification. Likewise in figs. ~~4A~~, ~~5B~~, ~~6A~~, the aforementioned reference labels need to be explicitly described in the specification description of these drawing figures. Additionally, newly added reference labels ⁴/₁₀, ⁴/₂₀ need description in figs. ~~6A~~, ~~6B~~. Furthermore, it is unclear if the amended reference labels in fig. 5B have been correspondingly described in the specification. Appropriate correction is required.

The drawings are objected to because of the following: In fig. 3, note that it is again inquired whether the central reference label "114b" should correctly be --114c--? A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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h Claims 1, 3, ⁶12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Turunen et al.

Turunen et al (Fig. 1) discloses a dielectric block duplexer (1) comprising a reception section (A) and a transmit section (B). The reception section includes conductively coated resonator holes (R1, R2, R3, R4) and the transmission section includes conductively coated resonator holes (T1, T2, T3). The dielectric block has side & bottom surfaces substantially coated with a conductive material except for portions of the front side surface which are devoid of conductive material. Note that a reception terminal (Rx), an antenna terminal (ANT) and a transmission terminal (Tx) is disposed at corresponding non-conductive portions of the front side face. Also, note that a first non-conductive or open areas are disposed on the front side surface (e.g. adjacent resonator R2) to inherently affect the coupling and loading of resonator (R2). As described at col 4, ls 25-32, it is described that the degree of coupling adjustment can be affected by the width of conductive strips separating adjacent open areas. A width adjustment of the conductive strips provides a corresponding adjustment of the area of the non-conductive areas, and thus adjusts the coupling to the resonators. Furthermore, note that relative to claim 6, a third non-conductive area is adjacent resonator (R3).

Claims 2, 4, 5, 7- 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Turunen et al in view of McVeety et al (of record).

Turunen et al discloses the claimed invention including non-conductive regions on the front side surface which are isolated from each other by the conductive strips yet are integrated

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together by gaps between the strips separating adjacent non-conductive regions. However, Turunen et al does not disclose that the transmit, antenna, and reception terminals are isolated from the conductive layer on the front side surface.


McVeety et al discloses in Fig. 12 thereof that providing terminal electrodes (120, 126) which are isolated from the surrounding conductive layer is considered conventional in the art. Also evident from fig. 12, an electrode (122) can be disposed in the non-conductive area to further affect the resonator coupling.

Accordingly, with respect to claim 2, it would have been obvious in view of the references, taken as a whole, to have modified the reception, antenna and transmission terminals of Turunen et al to have alternatively been isolated from the surrounding conductive layer, such as taught by McVeety et al. Such a modification would have been considered an obvious substitution of art recognized equivalent duplexer terminals and thus would not have affected the function of such terminals. Furthermore, with respect to claims 7, 8, it would have been obvious to have added an additional conductive layer in the non-conductive area adjacent resonators (R2, R3) in a manner taught by McVeety et al (fig. 12). Such a modification would have provided the advantageous benefit of an improved resonator coupling as taught by McVeety et al, thereby suggesting the obviousness of such a modification. Moreover, with respect to claims 9, 10, as an obvious consequence of such a modification, adjusting the dimensions (e.g. length) of such an additional conductive section would have been obviously used to provide for optimized coupling, thereby suggesting the obviousness of such a modification.

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Applicant's arguments with respect to claims 1-10, 12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benny Lee whose telephone number is (703) 308 4902.


BENNY T. LEE
PRIMARY EXAMINER
B. Lee ART UNIT 2817

February 6, 2003